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**DATE: September 30, 2008**

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**FROM:** Stephen C. MacDonald, Ph.D. 2737 **Our Ref. #:** MMI-0102 (14972.105004)

**NUMBER OF PAGES (Including Cover Page): 4**

**MESSAGE:**

In re Application of: )  
SUE K. DENISE, ET AL. )  
Application No. 10/750,622 ) **Confirmation No. 2415**  
Filed: December 31, 2003 )  
Title: COMPOSITIONS, METHODS AND SYSTEMS FOR )  
INFERRING BOVINE BREED )

**Paper Attached:**

Transmittal Form (1 page)  
Request to Apply Prior Issue Fee Payment (1 page)  
Payment of Issue Fee (1 page)

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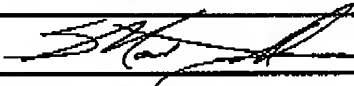
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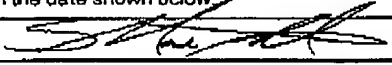
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|   |                        |                         |
|---|------------------------|-------------------------|
| <b>TRANSMITTAL FORM</b><br><br>(to be used for all correspondence after initial filing) | Application Number     | 10/750,622              |
|   | Filing Date            | December 31, 2003       |
|   | First Named Inventor   | Sue K. DeNise, et al.   |
|   | Art Unit               | 1637                    |
|   | Examiner Name          | David C. Thomas         |
| Total Number of Pages in This Submission  | Attorney Docket Number | MMI-0102 (14972.105004) |

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| ENCLOSURES (check all that apply)  |  |  |
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| <div style="border: 1px solid black; padding: 5px;"> <b>Remarks</b><br/> <br/> </div>  |  |  |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT |   |          |        |
|--|---|----------|--------|
| Firm Name                                  | King & Spalding, LLP  |          |        |
| Signature                                  |  |          |        |
| Printed Name                               | Stephen C. MacDonald, Ph.D.   |          |        |
| Date                                       | September 30, 2008  | Reg. No. | 60,401 |

| CERTIFICATE OF TRANSMISSION/MAILING   |   |      |                    |
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| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. |   |      |                    |
| Signature   |  |      |                    |
| Typed or printed name   | Stephen C. MacDonald, Ph.D.   | Date | September 30, 2008 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 422 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

**DENISE ET AL.**Application No. **10/750,622**Filed: **December 31, 2003**For: **COMPOSITIONS, METHODS AND SYSTEMS FOR**  
**INFERRING BOVINE BREED**Attorney Docket No. **MMI-0102**  
**(14972.105004)**Examiner: **David C. Thomas**Art Unit: **1637**

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**REQUEST TO APPLY PRIOR ISSUE FEE PAYMENT**

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Mail Stop **ISSUE FEE**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicant respectfully requests that the issue fee paid on March 3, 2008 in the above-identified patent application be reapplied to this application in fulfillment of the new Notice of Allowance and Issue Fees Due mailed on September 12, 2008. A completed form "PART B-FEE(S) TRANSMITTAL" accompanies this request.

Respectfully submitted,

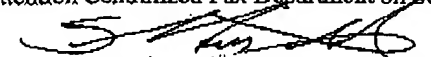
Stephen C. MacDonald, Ph.D.  
Reg. No. 60,401King & Spalding LLP  
35<sup>th</sup> Floor, 1180 Peachtree Street, N.E.  
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**CERTIFICATE OF MAILING (37 CFR 1.8a)**

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Stephen C. MacDonald, Reg. No. 60,401

## PART B - FEE(S) TRANSMITTAL

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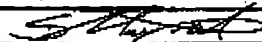
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|  |                    |
|--|--------------------|
| Stephen C. MacDonald, Ph.D.  | (Depositor's name) |
|  | (Signature)        |
| September 30, 2008   | (Date)             |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO. |
|-----------------|-------------|----------------------|----------------------------|------------------|
| 10/750,622      | 12/31/2003  | Sue K. DeNise        | MM1-0102<br>(14972.103004) | 2415             |

TITLE OF INVENTION: COMPOSITIONS, METHODS AND SYSTEMS FOR INFERRING BOVINE BREED

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FES | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO           | \$1440        | \$0                 | \$1440               | \$1440           | 12/12/2008 |

| EXAMINER        | ART UNIT | CLASS-SUBCLASS |
|-----------------|----------|----------------|
| THOMAS, DAVID C | 1637     | 536-023100     |

## 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

## 2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

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2

3

## 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

## (A) NAME OF ASSIGNEE

Cargill, Incorporated  
MetaMorphix, Inc.

## (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Wayzata, MN  
Beltville, MD

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

## 4a. The following fee(s) are submitted:

- ☒ Issue Fee
- ☒ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies

## 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

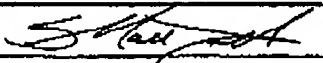
- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 11-0980 (enclose an extra copy of this form).

## 5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☒ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

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Authorized Signature



Date September 30, 2008

Typed or printed name Stephen C. MacDonald, Ph.D.

Registration No. 60,401

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